OUTER RING FOR CONSTANT VELOCITY UNIVERSAL JOINT EXCELLENT IN ANTI-FLAKING CHARACTERISTIC AND SHAFT STRENGTH AND MANUFACTURE THEREOF

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- European: C21D9/00P; C22C38/12; C22C38/14; C22C38/60; F16D3/223
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Abstract of **JP 2000154828 (A)**

PROBLEM TO BE SOLVED: To obtain the excellent anti-flaking characteristic as the outer ring for a constant velocity universal joint and also make a latching property and rolling property favorable. SOLUTION: This outer race contains the followings at a mass %; C: 0.45-0.59%, Si: 0.15-0.4%, Mn: 0.15-0.45%, S: 0.005-0.15%, Mo: 0.1-0.35%, B: 0.005-0.005%, Al: 0.015-0.05%, Ti: 0.015-0.03%. The effective hard layer depth (t) in the track groove of a cup is as follows; the ratio (t/w) between (t) and a cup thickness (w) is 0.25-0.45. The effective hard layer depth of the end of an involute seration is as follows; the ratio (t/r) between (t) and a radius (r) is 0.20-0.50. Further, an old austenite crystal grain of the end of the involute seration is 8 or more at JIS grain number.

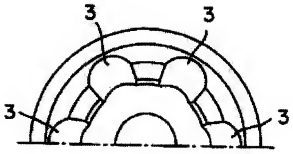

FIG. 1A

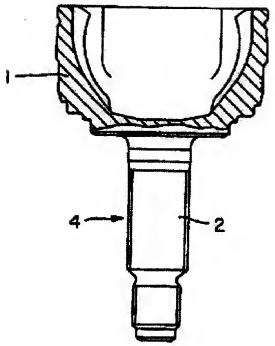

FIG. 1B